=> D HIS

(FILE 'HOME' ENTERED AT 12:57:24 ON 02 NOV 2000)

FILE 'USPATFULL, INSPEC, EUROPATFULL' ENTERED AT 12:57:44 ON 02 NOV 2000
L1 38997 S ERGONOMIC? OR HUMAN FACTOR#
L2 5612 S L1 AND PHYS?
L3 741 S L2 AND SIMULAT?
L4 385 S L3 AND MOVEMENT#
L5 207 S L4 AND EVENT#
L6 34 S L5 AND PHYSIOLOGICAL

=> D L6 1-34 IBIB ABS

L6 ANSWER 1 OF 34 USPATFULL
ACCESSION NUMBER: 2000:81754 USPATFULL
TITLE: **Ergonomic** man-machine interface incorporating adaptive pattern recognition based control system
INVENTOR(S): Hoffberg, Steven Mark, 20 Greystone Ter., Yonkers, NY, United States 10701-1705
Hoffberg-Borghesani, Linda Irene, 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 6081750	20000627
APPLICATION INFO.:	US 1995-471213	19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-812805, filed on 23 Dec 1991, now patented, Pat. No. US 5903454
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Gordon, Paul P.
ASSISTANT EXAMINER: Patel, Ramesh
LEGAL REPRESENTATIVE: Milde, Hoffberg & Macklin, LLP
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 7575
AB An adaptive interface for a programmable system, for predicting a desired user function, based on user history, as well as machine internal status and context. The apparatus receives an input from the user and other data. A predicted input is presented for confirmation by the user, and the predictive mechanism is updated based on this feedback. Also provided is a pattern recognition system for a multimedia device, wherein a user input is matched to a video stream on a conceptual basis, allowing inexact programming of a multimedia device. The system analyzes a data stream for correspondence with a data pattern for processing and storage. The data stream is subjected to adaptive pattern recognition to extract features of interest to provide a highly compressed representation which may be efficiently processed to determine correspondence. Applications of the interface and system include a VCR, medical device, vehicle control system, audio device, environmental control system, securities trading terminal, and smart house. The system optionally includes an actuator for effecting the environment of operation, allowing closed-loop feedback operation and automated learning.

L6 ANSWER 2 OF 34 USPATFULL
ACCESSION NUMBER: 1999:84486 USPATFULL
TITLE: External device for eluding masculine impotence
INVENTOR(S): Vergara, Roberto Jose Romero, Turina 10-1o., 47006 Valladolid, Spain

	NUMBER	DATE
PATENT INFORMATION:	US 5928134	19990727
APPLICATION INFO.:	US 1997-789956	19970130 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	ES 1996-211	19960130

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Brown, Michael A.
LEGAL REPRESENTATIVE: Kolisch Hartwell Dickinson McCormack & Heuser
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 525

AB An external device for eluding masculine impotence, comprising: (A) SUPPORT, with a rigid core and a softer lining, it lies along the penis, to which it communicates its rigidity, since both are enveloped in a preservative. To avoid tautness, rubbing and pinching, the inner side of the preservative is previously wetted with an aqueous type lubricant. (B) FASTENER, made of rigid material, is attached to said support by means of two hinges, thus maintaining the support in its proper place despite the effort exerted during its use. (C) TIE, made of soft, flexible material, maintains the fastener well tightened to the body by pulling from it from the front and rear. It is useful for coitus performance when the erection is nonexistent or insufficient in intensity or duration.

L6 ANSWER 3 OF 34 USPATFULL
ACCESSION NUMBER: 1999:76332 USPATFULL
TITLE: Human factored interface incorporating adaptive pattern recognition based controller apparatus
INVENTOR(S): Hoffberg, Steven M., 20 Greystone Ter., Yonkers, NY, United States 10701-1705
Hoffberg-Borghesani, Linda I., 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 5920477	19990706
APPLICATION INFO.:	US 1995-469597	19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-812805, filed on 23 Dec 1991, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Gordon, Paul P.
ASSISTANT EXAMINER: Brown, Thomas E
LEGAL REPRESENTATIVE: Hoffberg, Steven M.Milde, Hoffberg & Macklin, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT: 7282

AB The need for a more-readily usable interface for programmable devices is

widely recognized. The present invention relates to programmable sequencing devices, or, more particularly, the remote controls for consumer electronic devices. The present invention provides an enhanced interface for facilitating human input of a desired control sequence in a programmable device by employing specialized visual feedback. The present invention also relates to a new interface and method of interfacing with a programmable device, which is usable as an interface for a programmable video cassette recorder.

L6 ANSWER 4 OF 34 USPATFULL

ACCESSION NUMBER:	1999:57123 USPATFULL
TITLE:	Human-factored interface corporating adaptive pattern recognition based controller apparatus
INVENTOR(S):	Hoffberg, Linda Irene, 40 Jackson Dr., Acton, MA, United States 01720 Hoffberg, Steven M., 29 Buckout Rd., West Harrison, NY, United States 10604

	NUMBER	DATE
PATENT INFORMATION:	US 5903454	19990511
APPLICATION INFO.:	US 1991-812805	19911223 (7)

DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Gordon, Paul P.
ASSISTANT EXAMINER:	Brown, Thomas E.
LEGAL REPRESENTATIVE:	Hoffberg, Steven M.
NUMBER OF CLAIMS:	37
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT:	5821

AB The need for a more-readily usable interface for programmable devices is
widely recognized. The present invention relates to programmable sequencing devices, or, more particularly, the remote controls for consumer electronic devices. The present invention provides an enhanced interface for facilitating human input of a desired control sequence in a programmable device by employing specialized visual feedback. The present invention also relates to a new interface and method of interfacing with a programmable device, which is usable as an interface for a programmable video cassette recorder.

L6 ANSWER 5 OF 34 USPATFULL

ACCESSION NUMBER:	1999:54455 USPATFULL
TITLE:	**Ergonomic** man-machine interface incorporating adaptive pattern recognition based control system
INVENTOR(S):	Hoffberg, Steven M., 20 Greystone Ter., Yonkers, NY, United States 10701-1705 Hoffberg-Borghesani, Linda I., 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 5901246	19990504
APPLICATION INFO.:	US 1995-469104	19950606 (8)

DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Mancuso, Joseph
ASSISTANT EXAMINER:	Patel, Jayanti K.
LEGAL REPRESENTATIVE:	Hoffberg, Steven M.
NUMBER OF CLAIMS:	21
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT:	7575

AB An adaptive interface for a programmable system, for predicting a desired user function, based on user history, as well as machine internal status and context. The apparatus receives an input from the user and other data. A predicted input is presented for confirmation by the user, and the predictive mechanism is updated based on this feedback. Also provided is a pattern recognition system for a multimedia device, wherein a user input is matched to a video stream on a conceptual basis, allowing inexact programming of a multimedia device. The system analyzes a data stream for correspondence with a data pattern for processing and storage. The data stream is subjected to adaptive pattern recognition to extract features of interest to provide a highly compressed representation which may be efficiently processed to determine correspondence. Applications of the interface and system include a VCR, medical device, vehicle control system, audio device, environmental control system, securities trading terminal, and smart house. The system optionally includes an actuator for effecting the environment of operation, allowing closed-loop feedback operation and automated learning.

L6 ANSWER 6 OF 34 USPATFULL

ACCESSION NUMBER:	1999:25321 USPATFULL
TITLE:	**Ergonomic** man-machine interface incorporating adaptive pattern recognition based control system
INVENTOR(S):	Hoffberg, Steven M., 20 Greystone Ter., Yonkers, NY, United States 10701-1705 Hoffberg-Borghesani, Linda I., 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 5875108	19990223
APPLICATION INFO.:	US 1995-471834	19950606 (8)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-812805, filed on 23 Dec 1991
DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Elmore, Reba I.
ASSISTANT EXAMINER:	Brown, Thomas E
LEGAL REPRESENTATIVE:	Hoffberg, Steven M.Milde, Hoffberg & Macklin, LLP
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	32 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT:	9381

AB An adaptive interface for a programmable system, for predicting a desired user function, based on user history, as well as machine internal status and context. The apparatus receives an input from the user and other data. A predicted input is presented for confirmation by the user, and the predictive mechanism is updated based on this feedback. Also provided is a pattern recognition system for a multimedia device, wherein a user input is matched to a video stream on a conceptual basis, allowing inexact programming of a multimedia device. The system analyzes a data stream for correspondence with a data pattern for processing and storage. The data stream is subjected to adaptive pattern recognition to extract features of interest to provide a highly compressed representation which may be efficiently processed to determine correspondence. Applications of the interface and system include a VCR, medical device, vehicle control system, audio device, environmental control system, securities trading terminal, and smart house. The system optionally includes an actuator for effecting the environment of operation, allowing closed-loop feedback operation and automated learning.

L6 ANSWER 7 OF 34 ATFULL
ACCESSION NUMBER: 1999:16722 USPATFULL
TITLE: Morphological pattern recognition based controller system
INVENTOR(S): Hoffberg, Steven M., 20 Greystone Ter., Yonkers, NY, United States 10701-1705
Hoffberg-Borghesani, Linda I., 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 5867386	19990202
APPLICATION INFO.:	US 1995-469068	19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-812805, filed on 23 Dec 1991
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Elmore, Reba I.
ASSISTANT EXAMINER: Brown, Thomas E.
LEGAL REPRESENTATIVE: Hoffberg, Steven M.Milde, Hoffberg & Macklin LLP
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT: 5725
AB The need for a more-readily usable interface for programmable devices is
widely recognized. The present invention relates to programmable sequencing devices, or, more particularly, the remote controls for consumer electronic devices. The present invention provides an enhanced interface for facilitating human input of a desired control sequence in a programmable device by employing specialized visual feedback. The present invention also relates to a new interface and method of interfacing with a programmable device, which is usable as an interface for a programmable video cassette recorder.

L6 ANSWER 8 OF 34 USPATFULL
ACCESSION NUMBER: 1998:148142 USPATFULL
TITLE: Updating graphical objects based on object validity periods
INVENTOR(S): Pose, Ronald David, Caulfield North, Australia
Regan, Matthew James, Glen Waverley, Australia
PATENT ASSIGNEE(S): Monash University, Clayton, Australia (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5841439	19981124
APPLICATION INFO.:	US 1997-847567	19970424 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-307330, filed on 16 Sep 1994, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	AU 1994-701398	19940722

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Nguyen, Phu K.
ASSISTANT EXAMINER: Buchel, Rudolph
LEGAL REPRESENTATIVE: Fliesler, Dubb, Meyer & Lovejoy, LLP
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 18 Drawing Page(s)
LINE COUNT: 2552
AB A graphic display system includes a set of rendering engines and a

plurality of data storage units. Each data storage unit in the set of data storage units is coupled to at least one rendering engine in the set of rendering engines. A selection means is included in the graphic display system for selecting a data storage unit in the plurality of data storage units. The selected data storage unit is to be used for storing data representing an object to be displayed by the graphic display system and is selected based on a validity period of the object.

The selection means includes means for determining a size validity period of the object and means for determining a translational validity period of the object. The translational validity period is a time required for the object to change by a predetermined translational threshold, wherein the predetermined translational threshold is a first angle extending from a line that passes through both a reference point and the object. The size validity period is a time required for the object to change by a predetermined size threshold, wherein the predetermined size threshold is a second angle extending from the line.

L6 ANSWER 9 OF 34 USPATFULL

ACCESSION NUMBER:	1998:76473 USPATFULL
TITLE:	Human factored interface incorporating adaptive pattern recognition based controller apparatus
INVENTOR(S):	Hoffberg, Steven M., 29 Buckout Rd., West Harrison, NY, United States 10604 Hoffberg-Borghesani, Linda I., 40 Jackson Dr., Acton, MA, United States 01720

	NUMBER	DATE
PATENT INFORMATION:	US 5774357	19980630
APPLICATION INFO.:	US 1995-471215	19950606 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-812805, filed on 23 Dec 1991	

DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Elmore, Reba I.
ASSISTANT EXAMINER:	Marc, McDieunel
LEGAL REPRESENTATIVE:	Hoffberg, Steven M.Milde, Hoffberg & Macklin, LLP
NUMBER OF CLAIMS:	27
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	32 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT:	7695

AB A human interface device for a user, including a data transmission selector for selecting at least one of a plurality of simultaneously transmitted programs being responsive to an input; a program database containing information relating to at least one the plurality of programs, having an output; a graphical user interface for receiving user commands; and a controller for controlling the graphical user interface and the data transmission selector, the controller determining a user characteristic, receiving the output of the program database and presenting, based on the user characteristic and the program database, information relating to at least one of the plurality of programs on the graphic user interface in association with a command, the graphic user interface allowing the user to select the command and thereby authorize an operation in relation to the at least one of the plurality of programs. An objective user characteristic is detected based on one or more temporal-spatial user characteristics of the input, including a velocity component, an efficiency of input, an accuracy of input, an interruption of input and a high frequency component of the input signal.

L6 ANSWER 10 OF 34 USPATFULL
ACCESSION NUMBER: 1998:21203 USPATFULL
TITLE: Method for mediating social and behavioral processes in
medicine and business through an interactive telecommunications guidance system
INVENTOR(S): Bro, L. William, 8939 S. Sepulveda #530, Los Angeles, CA, United States 90045

	NUMBER	DATE
PATENT INFORMATION:	US 5722418	19980303
APPLICATION INFO.:	US 1994-315630	19940930 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-112955, filed on 30 Aug 1993, now patented, Pat. No. US 5377258, issued on 27 Dec 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Nasser, Robert
ASSISTANT EXAMINER: Huang, Stephen
LEGAL REPRESENTATIVE: Cislo & Thomas
NUMBER OF CLAIMS: 58
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 4076
AB A method for mediating social and behavioral influence processes through
an interactive telecommunications guidance system for use in medicine and business (10) that utilizes an expert (200) such as a **physician**, counselor, manager, supervisor, trainer, or peer in association with a computer (16) that produces and sends a series of motivational messages and/or questions to a client, patient or employee (50) for changing or reinforcing a specific behavioral problem and goal management. The system (10) consists of a client database (12) and a client program (14) that includes for each client unique motivational messages and/or questions based on a model such as the transtheoretical model of change comprising the six stages of behavioral change (100) and
the 14 processes of change (114), as interwining, interacting variables in the modification of health, mental health, and work site behaviors of
the client or employee (50). The client program (14) in association with
the expert (200) utilizes the associated 14 processes of change (114) to
move the client (50) through one of the six stages of behavioral change (100) when appropriate by using a plurality of transmission and receiving means. The database and program are operated by a computer (16) that at preselected time periods sends the messages and/or questions to the client (50) through use of a variety of transmission means and furthermore selects a platform of behavioral issues that is to
be addressed based on a given behavioral stage or goal (100) at a given time of day.

L6 ANSWER 11 OF 34 USPATFULL
ACCESSION NUMBER: 1998:19203 USPATFULL
TITLE: **Physiological** evaluation and exercise system
INVENTOR(S): Bond, Malcolm, Winters, CA, United States
Engle, Gary, Fair Oaks, CA, United States
Naumann, Theodore Fleidner, Shingle Springs, CA, United
States
PATENT ASSIGNEE(S): Cedaron Medical, Inc., Davis, CA, United States (U.S.

corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5720711	19980224
APPLICATION INFO.:	US 1994-351502	19941207 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1991-789834, filed on 8 Nov 1991, now patented, Pat. No. US 5597373
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Donnelly, Jerome
ASSISTANT EXAMINER: Richard, Glenn E.
LEGAL REPRESENTATIVE: Fliesler, Dubb, Meyer & Lovejoy
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 1763

AB A system for isolating, evaluating and exercising the muscle groups of the human hand which includes structure for detecting the cardinal **movements** of the hand and translating the **movements** into rotational data for the system, the structure for detecting effectively isolating the **movements** of the hand so that the **movements** of other muscle groups of the body are not detected by the system. The system also generally includes an assembly for providing a selective variable resistance to the structure for detecting and for ascertaining the force applied to the structure for detecting by the **movements** of the hand.

L6 ANSWER 12 OF 34 USPATFULL

ACCESSION NUMBER: 1998:4255 USPATFULL
TITLE: Methods of treating circadian rhythm phase disorders
INVENTOR(S): Lewy, Alfred J., Portland, OR, United States
Sack, Robert L., Portland, OR, United States
Parrott, Keith A., Corvallis, OR, United States
Ayres, James W., Corvallis, OR, United States
PATENT ASSIGNEE(S): State of Oregon, Portland, OR, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5707652	19980113
APPLICATION INFO.:	US 1995-480558	19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-97443, filed on 26 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-842723, filed on 25 Feb 1992, now patented, Pat. No. US 5242941 which is a continuation of Ser. No. US 1990-621866, filed on 4 Dec 1990
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Rose, Shep K.
LEGAL REPRESENTATIVE: McDonnell Boehnen Hulbert & Berghoff
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1162
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for treating circadian rhythm disorders and sleep disorders are described. The method involves oral administration of a sustained release composition of melatonin to produce a normal melatonin pattern when the normal pattern has been disrupted or is missing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 34 USPATFULL

ACCESSION NUMBER: 97:114609 USPATFULL
TITLE: **Physiological** evaluation and exercise system
INVENTOR(S): Bond, Malcolm, Winters, CA, United States
Engle, Gary, Fair Oaks, CA, United States
Forma, Joseph J., Grass Valley, CA, United States
Naumann, Theodore F., Shingle Springs, CA, United States(4)
PATENT ASSIGNEE(S): Cedaron Medical, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5695431	19971209
APPLICATION INFO.:	US 1994-350628	19941207 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1991-789834, filed on 8 Nov 1991, now patented, Pat. No. US 5597373
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Apley, Richard J.
ASSISTANT EXAMINER: Richman, Glenn E.
LEGAL REPRESENTATIVE: Fliesler, Dubb, Meyer & Lovejoy
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 1734

AB A system for isolating, evaluating and exercising the muscle groups of the human hand which includes apparatus for detecting the cardinal **movements** of the hand and translating the **movements** into rotational data for the system, the apparatus for detecting effectively isolating the **movements** of the hand so that the **movements** of other muscle groups of the body are not detected by the system. The system also generally includes a mechanism for providing a selective variable resistance to the apparatus for detecting and for ascertaining the force applied to the apparatus for detecting by the **movements** of the hand.

L6 ANSWER 14 OF 34 USPATFULL
ACCESSION NUMBER: 97:62382 USPATFULL
TITLE: Device and method for estimating a mental decision
INVENTOR(S): Smyth, Christopher C., Fallston, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Army, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 5649061	19970715
APPLICATION INFO.:	US 1995-439392	19950511 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Moore, David K.
ASSISTANT EXAMINER: Smith, Jeffrey S.
LEGAL REPRESENTATIVE: Krosnick, Freda L.; Roberto, Muzio B.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 4
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1348

AB A device and method for estimating a mental decision to select a visual cue from the viewer's eye fixation and corresponding single **event** evoked cerebral potential. The device comprises an eyetracker, an electronic biosignal processor and a digital computer. The eyetracker determines the instantaneous viewing direction from oculometric measurements and a head position and orientation sensor. The electronic processor continually estimates the cerebral

electroencephalogramic potential from scalp surface measurements following corrections for electrooculogramic, electromyogramic and electrocardiogramic artifacts. The digital computer analyzes the viewing direction data for a fixation and then extracts the corresponding single **event** evoked cerebral potential. The fixation properties, such as duration, start and end pupil sizes, end state (saccade or blink) and gaze fixation count, and the parametric representation of the evoked potential are all inputs to an artificial neural network for outputting an estimate of the selection interest in the gaze point of regard. The artificial neural network is trained off-line prior to application to represent the mental decisions of the viewer. The device can be used to control computerized machinery from a video display by ocular gaze point of regard alone, by determining which visual cue the viewer is looking at and then using the estimation of the task-related selection as a selector switch.

L6 ANSWER 15 OF 34 USPATFULL

ACCESSION NUMBER:	97:41323 USPATFULL
TITLE:	Spatial disorientation detector
INVENTOR(S):	Repperger, D. W., Dayton, OH, United States Albery, W. B., Spring Valley, OH, United States
PATENT ASSIGNEE(S):	The United States of America as represented by the Secretary of the Air Force, Washington, DC, United States (U.S. government)

	NUMBER	DATE	
PATENT INFORMATION:	US 5629848	19970513	
APPLICATION INFO.:	US 1992-994200	19921204	(7)
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Teska, Kevin J.		
ASSISTANT EXAMINER:	Louis-Jacques, Jacques H.		
LEGAL REPRESENTATIVE:	Hollins, Gerald B.; Kundert, Thomas L.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	33 Drawing Figure(s); 17 Drawing Page(s)		
LINE COUNT:	850		

AB A spatial disorientation detector system capable of warning a pilot of potentially disorienting flight conditions in response to Kalman filter modeling of human response characteristics. The Kalman filter models are representative of human semicircular canal and otolith responses and are capable of more accurate prediction of actual pilot disorientation conditions than are systems which respond with simple magnitude measurement of disorientation stress. Examples of disorienting environments are also disclosed.

L6 ANSWER 16 OF 34 USPATFULL

ACCESSION NUMBER:	97:22054 USPATFULL
TITLE:	Vehicle brake-pressure control device
INVENTOR(S):	Nell, Joachim, Ostfildern, Germany, Federal Republic of Fritzsching, Torsten, Ludwigsburg, Germany, Federal Republic of Kruse, Werner, Schorndorf, Germany, Federal Republic of
PATENT ASSIGNEE(S):	Mercedes-Benz AG, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION:	US 5611606	19970318	
APPLICATION INFO.:	US 1994-326283	19941020	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1993-4335769	19931020

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Young, Lee W.
LEGAL REPRESENTATIVE: Evenson, McKeown, Edwards & Lenahan, P.L.L.C.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1086

AB A brake-pressure control device for a hydraulic multi-circuit brake system provides for brake-pressure generation, in addition to a brake unit, hydraulic regulating cylinders with electromotively drivable pistons. By electronic activation of the cylinders, the wheel brakes can be activated even without the cooperation of the driver. In the regulating cylinders of the front-wheel brakes, the pistons have a basic position, out of which brake-pressure build-up and reduction strokes can be executed. The pistons of the regulating cylinders of the rear-wheel brakes have a basic position which corresponds to the largest volume of the outlet-pressure spaces. The regulating cylinders are equipped with electronic position transmitters. A sensor whose output signal measures the expected value of the vehicle deceleration with which the driver wishes to brake is also provided. The brake-pressure build-up on the rear-wheel brakes takes place solely by the brake-pressure regulating members and on the front-wheel brakes both as a result of the actuation of the brake unit and as a result of the activation of the brake-pressure regulating members with the effect of a follow-up of the pistons into the position linked to the expected value of the vehicle deceleration.

L6 ANSWER 17 OF 34 USPATFULL
ACCESSION NUMBER: 97:7491 USPATFULL
TITLE: **Physiological** evaluation and exercise system
INVENTOR(S): Bond, Malcolm, Winters, CA, United States
Engle, Gary, Fair Oaks, CA, United States
Forma, Joseph J., Grass Valley, CA, United States
Naumann, Theodore F., Shingle Springs, CA, United States(4)
PATENT ASSIGNEE(S): Cedaron Medical, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION:	US 5597373	19970128	
APPLICATION INFO.:	US 1991-789834	19911108	(7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Apley, Richard J.
ASSISTANT EXAMINER: Richman, Glenn E.
LEGAL REPRESENTATIVE: Fliesler, Dubb, Meyer & Lovejoy
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 1822

AB A system for isolating, evaluating and exercising the muscle groups of the human hand, wrist, arm and shoulder including an adaptable detector

for interpreting the cardinal **movements** of at least one muscle group of the hand during flexion, extension, or deviation of the wrist, or abduction, opposition, flexion or hyperextension of individual digits of the hand. The detector translates the **movements** of the muscle group into rotational data for the system and effectively isolates the **movements** of the muscle group so that the **movements** of other muscle groups of the body are not detected by the system. The system also includes a controlled resistance coupled to the detector which provides a variable resistance against the muscle group and ascertains the force applied to the detector by the **movements** of the one muscle group. The resistance can be varied to provide isotonic, isokinetic, or isometric modes of testing against said at least one muscle group.

L6 ANSWER 18 OF 34 USPATFULL

ACCESSION NUMBER:	96:114195 USPATFULL
TITLE:	Method of using and apparatus for use with exercise machines to achieve programmable variable resistance
INVENTOR(S):	Anjanappa, Muniswamappa, Columbia, MD, United States Miller, Warren G., Linthicum, MD, United States
PATENT ASSIGNEE(S):	University of Maryland Baltimore Campus, Baltimore, MD, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5583403	19961210
APPLICATION INFO.:	US 1995-435380	19950505 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-266901, filed on 24 Jun 1994	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Sircus, Brian	
LEGAL REPRESENTATIVE:	Armstrong, Westerman, Hattori, McLeland & Naughton	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	24 Drawing Figure(s); 16 Drawing Page(s)	
LINE COUNT:	1662	

AB An exercise machine which can independently vary the force and the speed at the user end is developed. The exercise machine includes a constant torque, variable speed reversible motor, a temperature controlled magnetic particle clutch, a gear reducer, a controller, and a suitable lever mechanism. The motor, clutch and gear reducer are chosen in a combination in order to achieve a predetermined output so that any combination of isotonic, isokinetic, isometric, isotonic/isokinetic, constant, variable, active, passive, uni-directional or bi-directional exercise routines can be performed with the exercise machine. With suitable lever modifications, the resistance providing unit can be successfully modified to emulate a shoulder press, bench press, leg exercise machine, arm exercise machine, etc. The output parameters, user force and user speed, are controlled in real time to maintain accuracy. This is made possible by the use of a PC-based controller interfaced to off-the-shelf motor and clutch control boards. A user interface written in C programming language helps facilitate maintenance of user exercise records for future reference, maintains the large array of protocols and encourages direct user participation for protocol selection. The PC-based controller can also be replaced with a microcontroller-based controller to minimize the cost. The machine features three different levels of safety ensuring total user safety and minimizing any chances of mishaps.

L6 ANSWER 19 OF 34 PATFULL
ACCESSION NUMBER: 96:98678 USPATFULL
TITLE: Method of using and apparatus for use with exercise machines to achieve programmable variable resistance
INVENTOR(S): Anjanappa, Muniswamappa, Columbia, MD, United States
Miller, Warren G., Linthicum, MD, United States
PATENT ASSIGNEE(S): University of Maryland-Baltimore County, Baltimore, MD,
United States (U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION:	US 5569120	19961029	
APPLICATION INFO.:	US 1994-266901	19940624	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Crow, Stephen R.
ASSISTANT EXAMINER: Richman, Glenn E.
LEGAL REPRESENTATIVE: Armstrong, Westerman, Hattori, McLeland and Naughton
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 3874

AB An exercise machine which can independently vary the force and the speed at the user end is developed. The exercise machine includes a constant torque, variable speed reversible motor, a temperature controlled magnetic particle clutch, a gear reducer, a controller, and a suitable lever mechanism. The motor, clutch and gear reducer are chosen in a combination in order to achieve a predetermined output so that any combination of isotonic, isokinetic, isometric, isotonic/isokinetic, constant, variable, active, passive, uni-directional or bi-directional exercise routines can be performed with the exercise machine. With suitable lever modifications, the resistance providing unit can be successfully modified to emulate a shoulder press, bench press, leg exercise machine, arm exercise machine, etc. The output parameters, user force and user speed, are controlled in real time to maintain accuracy. This is made possible by the use of a PC-based controller interfaced to off-the-shelf motor and clutch control boards. A user interface written in C programming language helps facilitate maintenance of user exercise records for future reference, maintains the large array of protocols and encourages direct user participation for protocol selection. The PC-based controller can also be replaced with a microcontroller-based controller to minimize the cost. The machine features three different levels of safety ensuring total user safety and minimizing any chances of mishaps.

L6 ANSWER 20 OF 34 USPATFULL
ACCESSION NUMBER: 95:64003 USPATFULL
TITLE: Method for predicting alertness and bio-compatibility of work schedule of an individual
INVENTOR(S): Moore-Ede, Martin C., 110 Hundreds Rd., Wellesley Farms, MA, United States 02181
Mitchell, Ross E., 4 Allston St., West Newton, MA, United States 02165-2554

	NUMBER	DATE	
PATENT INFORMATION:	US 5433223	19950718	
APPLICATION INFO.:	US 1993-154359	19931118	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Smith, Ruth S.

LEGAL REPRESENTATIVE: Pressman, David R.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1036
AB A method enables the prediction of the likely alertness level of an individual at a given point in time based upon the analysis of certain biological and other parameters associated with the individual subject including, circadian phase of the biological clock, accumulated acute or chronic sleep deprivation, shift commencement and termination time, time of last sleep, environmental light, etc. Among other advantages, the method facilitates the creation of bio-compatible schedules for shift workers by providing an accurate model of the likely alertness level of the individual on a specific schedule.

L6 ANSWER 21 OF 34 USPATFULL
ACCESSION NUMBER: 95:33211 USPATFULL
TITLE: Method and apparatus for truth detection
INVENTOR(S): Farwell, Lawrence A., Potomac, MD, United States
PATENT ASSIGNEE(S): Conte, Francis Luca, Swampscott, MA, United States (U.S. individual)

	NUMBER	DATE	
PATENT INFORMATION:	US 5406956	19950418	
APPLICATION INFO.:	US 1993-16215	19930211	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Sykes, Angela D.
LEGAL REPRESENTATIVE: Conte, Francis L.
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 6894
AB A method of detecting information stored in the brain of a subject includes presenting to the subject in oddball series Probe, Target, and Irrelevant stimuli. The Probe stimuli are relevant to a situation under investigation; the Irrelevant stimuli are not; and the Target stimuli are identified to the subject as being noteworthy, and in response to which the subject is instructed to perform a task. The Target stimuli like the Probe stimuli are relevant to the situation under investigation. The method also includes detecting electrical brain responses for each of the stimuli; analyzing the responses for uncovering an **event** related brain potential; and comparing the Probe responses with the Target responses to determine whether the subject recognizes the Probes, and comparing the Probe responses with the Irrelevant responses to determine whether the subject does not recognize the Probes. Three exemplary headbands are disclosed for positioning electrodes at preferred locations on the subject's scalp for obtaining electrical responses therefrom.

L6 ANSWER 22 OF 34 USPATFULL
ACCESSION NUMBER: 95:5149 USPATFULL
TITLE: Cutaneous testing device for determining nervous system function
INVENTOR(S): Tuckett, Robert P., Salt Lake City, UT, United States
Horch, Kenneth W., Salt Lake City, UT, United States
Fisher, John H., Salt Lake City, UT, United States
Evans, Barry L., Murray, UT, United States
PATENT ASSIGNEE(S): Topical Testing, Inc., Salt Lake City, UT, United

States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5381805	19950117
APPLICATION INFO.:	US 1992-943438	19920909 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-713397, filed on 10 Jun 1991 which is a continuation-in-part of Ser. No. US 1990-469280, filed on 24 Jan 1990, now patented,
Pat. No. US 5022407, issued on 11 Jun 1991

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Sykes, Angela D.
LEGAL REPRESENTATIVE: Madson & Metcalf
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1169

AB An automatic apparatus for testing cutaneous responses of a patient is disclosed. The embodiments of the invention variously include components for: applying a nonambient temperature to the patient's skin to test the patient's response to thermal stimuli; pricking the patient's skin to test the patient's response to pain; indenting the patient's skin to test the patient's response to touch; vibrating the patient's skin to test the patient's response to vibration; and for making two spaced apart contacts with the patient's skin to test the patient's two point discrimination response. A general purpose computer and dedicated control circuits function to control the operation of the system and record the responses of the patient. The embodiments of the present invention are able to repeatedly reproduce each test so that the tests carried out are reproducible and accomplished in a minimum of time.

L6 ANSWER 23 OF 34 USPATFULL
ACCESSION NUMBER: 94:73711 USPATFULL
TITLE: Holographic display system
INVENTOR(S): Rowan, Larry, 34401/2 Caroline Ave., Culver City, CA, United States 90230

	NUMBER	DATE
PATENT INFORMATION:	US 5341229	19940823
APPLICATION INFO.:	US 1990-548750	19900705 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1988-244331, filed on 14 Jul 1988, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Sikes, William L.
ASSISTANT EXAMINER: Parsons, David
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 90 Drawing Figure(s); 60 Drawing Page(s)
LINE COUNT: 2130

AB A portable holographic display system emboding holographic plates which are disposed upon a plurality of thin film holographic emulsions coupled to multiple channel Kerr units that generate a series of multi-colored holographic images. The holographic images generated by transmission thin film emulsions are based on the number and order that multiple light channels, fiber optics elements and thin film holographic emulsions are illuminated. The process of illumination depends directly on the activation sequence of lens elements or cells, which contain an optically active medium controlled by command signals from a central control means coupled to a source of electrical power.

L6 ANSWER 24 OF 34 USPATFULL
ACCESSION NUMBER: 93:440 USPATFULL
TITLE: Assessment and modification of circadian phase and amplitude
INVENTOR(S): Czeisler, Charles A., Cambridge, MA, United States
Kronauer, Richard E., Cambridge, MA, United States
Allan, James S., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Boston, MA, United States
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5176133	19930105
APPLICATION INFO.:	US 1989-365949	19890615 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1987-66677, filed on 26 Jun 1987
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Smith, Ruth S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 58 Drawing Figure(s); 46 Drawing Page(s)
LINE COUNT: 3649

AB A method for accurately assessing and rapidly modifying the phase and amplitude of the endogenous circadian pacemaker is disclosed. A circadian cycle modification capacity assessment method comprises (before and after a stimulus) eliminating activity-related confounding factors associated with the sleep-rest cycle which otherwise mask the state of the endogenous circadian pacemaker. Based on either individual or normative assessment data, the circadian phase and amplitude modification method involves the application of bright (about 9,500 lux) light and, advantageously, episodes of imposed darkness, at critically chosen phases to achieve rapid and stable changes in phase and amplitude. The timing of the episodes of bright light may be chosen either by reference to empirically-derived phase response data, or by using a mathematical model in which the endogenous circadian pacemaker is a van der Pol oscillator. A forcing function in the model is substantially proportional to changes in the cube root of the surrounding illuminance, in lux. The amplitude of the endogenous circadian pacemaker may actually be reduced to substantially zero, so as to bring about dramatic phase modifications in diminishingly small periods of time. The methods find special utility in treating "jet lag" sufferers, shift workers, advanced circadian phase experienced by many elderly subjects, and those afflicted with delayed sleep phase insomnia.

L6 ANSWER 25 OF 34 USPATFULL
ACCESSION NUMBER: 92:98213 USPATFULL
TITLE: Assessment and modification of endogenous circadian phase and amplitude
INVENTOR(S): Czeisler, Charles A., Cambridge, MA, United States
Kronauer, Richard E., Cambridge, MA, United States
Allan, James S., Boston, MA, United States
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Boston, MA, United States
(U.S. corporation)

	NUMBER	DATE

PATENT INFORMATION: US 5167228 19921201
APPLICATION INFO.: US 1990-521041 19900509 (7)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1987-66677, filed on 26 Jun 1987
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Smith, Ruth S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 59 Drawing Figure(s); 47 Drawing Page(s)
LINE COUNT: 4082

AB A method for accurately assessing and rapidly modifying the phase and amplitude of the endogenous circadian pacemaker is disclosed. A circadian cycle modification capacity assessment method comprises (before and after a stimulus) eliminating activity-related confounding factors associated with the sleep-rest cycle which otherwise mask the state of the endogenous circadian pacemaker. Based on either individual or normative assessment data, the circadian phase and amplitude modification method involves the application of bright (about 9,500 lux) light and, advantageously, episodes of imposed darkness, at critically chosen phases to achieve rapid and stable changes in phase and amplitude. The timing of the episodes of bright light may be chosen either by reference to empirically-derived phase response data, or by using a mathematical model in which the endogenous circadian pacemaker is a second order differential equation of the van der Pol type, transformed into two complementary first order equations. A forcing function in the model is substantially proportional to changes in the cube root of the surrounding illuminance, in lux. The amplitude of the endogenous circadian pacemaker may actually be reduced to substantially zero, so as to bring about dramatic phase modifications in diminishingly small periods of time. The methods find special utility in treating "jet lag" sufferers, shift workers, advanced circadian phase experienced by many elderly subjects, and those afflicted with delayed sleep phase insomnia.

L6 ANSWER 26 OF 34 USPATFULL
ACCESSION NUMBER: 92:94121 USPATFULL
TITLE: Assessment and modification of a subject's endogenous circadian cycle
INVENTOR(S): Czeisler, Charles A., Cambridge, MA, United States
Kronauer, Richard E., Cambridge, MA, United States
Allan, James S., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Boston, MA, United States
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5163426	19921117
APPLICATION INFO.:	US 1987-66677	19870626 (7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Smith, Ruth S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 2836

AB A method for accurately assessing and rapidly modifying the phase and amplitude of the endogenous circadian pacemaker is disclosed. A circadian cycle modification capacity assessment method comprises (before and after a stimulus) eliminating activity-related confounding

factors associated with the sleep-rest cycle which otherwise mask the state of the endogenous circadian pacemaker. Based on either individual or normative assessment data, the circadian phase and amplitude modification method involves the application of bright (about 9,500 lux) light and, advantageously, episodes of imposed darkness, at critically chosen phases to achieve rapid and stable changes in phase and amplitude. The timing of the episodes of bright light may be chosen either by reference to empirically-derived phase response data, or by using a mathematical model in which the endogenous circadian pacemaker is a van der Pol oscillator. A forcing function in the model is substantially proportional to changes in the cube root of the surrounding illuminance, in lux. The amplitude of the endogenous circadian pacemaker may actually be reduced to substantially zero, so as to bring about dramatic phase modifications in diminishingly small periods of time. The methods find special utility in treating "jet lag" sufferers, shift workers, advanced circadian phase experienced by many elderly subjects, and those afflicted with delayed sleep phase insomnia.

L6 ANSWER 27 OF 34 USPATFULL

ACCESSION NUMBER:	92:46869 USPATFULL
TITLE:	Factor Xa based anticoagulant compositions
INVENTOR(S):	Esmon, Charles T., Oklahoma City, OK, United States Taylor, Jr., Fletcher B., Oklahoma City, OK, United States
PATENT ASSIGNEE(S):	Oklahoma Medical Research Foundation, Oklahoma City, OK, United States (U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION:	US 5120537	19920609	
APPLICATION INFO.:	US 1989-367544	19890614	(7)
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Stone, Jacqueline		
LEGAL REPRESENTATIVE:	Kilpatrick & Cody		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 3 Drawing Page(s)		
LINE COUNT:	653		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An anticoagulant composition containing an effective amount of factor Xa having the active serine site inactivated that functions rapidly and effectively in vivo to suppress coagulation. In a preferred embodiment, Factor Xa, a serine esterase that forms a complex with Factor Va, Ca++, and phospholipid to catalyze prothrombin activation, is first inactivated with an active site inhibitor, such as dansyl-glu-gly-arg-chloromethyl ketone, to form inactivated factor Xa. In another embodiment, Factor Xa is expressed from a gene sequence wherein the portion encoding the active serine region is modified. The inactivated protein retains the ability to bind to endogenous factor Va in vivo, and has a half-life of approximately ten hours. Administration of inactive factor Xa to the blood of a patient results in the formation of inactive factor Xa-Va complexes in vivo, thereby inhibiting coagulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 28 OF 34 USPATFULL

ACCESSION NUMBER:	92:26146 USPATFULL
TITLE:	Intrusion-free **physiological** condition

monitoring

INVENTOR(S): Tripp, Jr., Lloyd D., Dayton, [redacted] United States
Albery, William B., Kettering, [redacted]H, United States
Ellison, Richard E., Maryland Heights, MO, United States

PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Air Force, Washington, DC, United States (U.S. government)

	NUMBER	DATE
PATENT INFORMATION:	US 1039	19920407
APPLICATION INFO.:	US 1988-172146	19881114 (3)

DOCUMENT TYPE: Statutory
PRIMARY EXAMINER: Carone, Michael J.
LEGAL REPRESENTATIVE: Singer, Donald J.; Franz, Bernard E.; Hollins, Gerald B.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 775

AB A **physiological** well-being monitoring system especially suited for use by the pilot or other aircrew members of a high-performance aircraft such as a tactical aircraft is disclosed. The monitoring arrangement includes non-invasive sensing of arterial blood supply in the cranial adjacent portions of the pilot's body through the use of pulsating vascular bed optical signal transmission. The signal transmission is accomplished by way of sensors included in a pilot invisible and non-obstructing modification of, for example, the oxygen mask portion of the pilot life-support apparatus. Use of the **physiological** monitoring signals to generate alarm or assume control of the aircraft is also disclosed along with representative data associated with the sensed pilot **physiological** well-being indicators.

L6 ANSWER 29 OF 34 USPATFULL

ACCESSION NUMBER: 91:101414 USPATFULL
TITLE: Barrierized cigarette
INVENTOR(S): Perrine, Charles P., 2534 Terrace Rd., Fort Wayne, IN, United States 46805

	NUMBER	DATE
PATENT INFORMATION:	US 5072743	19911217
APPLICATION INFO.:	US 1981-336443	19811231 (6)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1978-925429, filed on 17 Jul 1978, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Millin, V.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 2354

AB Differentiation of surface is utilized for the prevention or arrest of forward finger edge slippage along the surface of a cigarette under new perception and consideration of all significant factors, including the **human factor**. Provision is sometimes included for automatic extinguishing of the cigarette or destruction of its smokable utility prior to dissipation of the means against slippage. A cigarette is manufactured having predetermined control against its being smoked or burned the full length of its tabacco content. Means employed are varying adaptations of **physics** and chemistry but basic is

either the principle of smothering or the utilization of combustion itself, or its product heat, in self defeating adaptation.

L6 ANSWER 30 OF 34 USPATFULL
ACCESSION NUMBER: 87:5804 USPATFULL
TITLE: Apparatus and methods for providing rapid protection from accelerative forces experienced by aircraft crew members
INVENTOR(S): Krogh, Steven B., King County, WA, United States
Lloyd, Adam J. P., Seattle, WA, United States
PATENT ASSIGNEE(S): The Boeing Company, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4638791	19870127
APPLICATION INFO.:	US 1985-757740	19850722 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Recla, Henry J.
LEGAL REPRESENTATIVE: Hughes & Cassidy
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 865

AB Apparatus and methods for increasing the tolerance level of an aircraft aircrew member to G forces by providing a rapid response to the onset of the normal accelerative forces to inflate an anti-G suit worn by the aircrew member. An electronic controller controls a servo valve which in turn controls a main valve for regulating the flow of gas into the inflatable G suit. The G suit is worn by the aircraft crew member to prevent pooling of blood in the lower portion of the body during aircraft maneuvers when G forces are experienced. The electronic controller receives a first input indicative of the amount of force applied to the control stick of the aircraft by the crew member, and a second input indicative of measured accelerative forces which are normal to the longitudinal axis of the aircraft. The electronic controller, preferably a microprocessor based controller, is responsive to the first input, and includes a programmable memory for storing data defining a schedule of the anticipated accelerative force levels which the aircraft will experience as a function of the applied control stick force. The microprocessor is programmed to decrease the anticipated accelerative force levels at a predetermined rate which is approximately equivalent to the rate of increase of measured accelerative forces. The anticipated force level is added to the actual accelerative force level to produce a command output for controlling the servo valve and/or for controlling a pressure regulator to initiate positive pressure breathing in a breathing device worn by the aircrew member.

L6 ANSWER 31 OF 34 INSPEC COPYRIGHT 2000 IEE
ACCESSION NUMBER: 1996:5280774 INSPEC
DOCUMENT NUMBER: C9607-7460-010
TITLE: Haptic specification of environmental **events** : implications for the design of adaptive, virtual interfaces.
AUTHOR: Brickman, B.J.; Hettinger, L.J.; Roe, M.M.; Liem Lu (Logicon Tech. Services Inc., Dayton, OH, USA);

SOURCE: Repperger, D.W.; Haas, M.W.
Proceedings of the IEEE 1996 [redacted]rtual Reality Annual International Symposium (Cat [redacted]o.96CB35922)
Los Alamitos, CA, USA: IEEE Comput. Soc. Press, 1996. p.147-53 of xvi+276 pp. 4 refs.
Conference: Santa Clara, CA, USA, 30 March-3 April 1996
Sponsor(s): IEEE Comput. Soc. Tech. Committee on Comput. Graphics; IEEE Neural Networks Council Virtual Reality Tech. Committee
Price: CCCC 0 8186 7295 1/96/$5.00
ISBN: 0-8186-7295-1
DOCUMENT TYPE: Conference Article
TREATMENT CODE: Application; Practical
COUNTRY: United States
LANGUAGE: English
DN C9607-7460-010
AB Future airborne crewstations are currently being designed that will incorporate multisensory virtual displays to convey operationally relevant information to crew members. In addition, these displays and associated controls will be designed to adapt to the changing psychological and **physiological** state of the user, and the tactical/environmental state of the external world. In support of this design goal, research is being conducted to explore the information extraction capabilities of the sensory modalities. Toward this end, an experiment was conducted to assess the degree to which force-reflective haptic stimulation can be used to provide individuals with information about their location and **movement** through space. Specifically, a force-reflecting, haptically-augmented aircraft control stick was designed and utilized with the goal of providing pilots with real-time information concerning lateral deviation (or "line-up") with respect to the runway in a **simulated** instrument landing task. Pilots executed **simulated** landing approaches with either the force-reflecting stick or a standard aircraft displacement stick under either calm or turbulent conditions. The results indicated a consistent advantage in performance and perceived workload for the force-reflecting stick, particularly under conditions of **simulated** turbulence. The results are discussed in terms of their relevance for the design of advanced airborne crewstations that utilize multisensory, adaptive, virtual interfaces.

L6 ANSWER 32 OF 34 EUROPATFULL COPYRIGHT 2000 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 995466 EUROPATFULL EW 200017 FS OS
TITLE: **SIMULATOR** PRECISION DEVICE APPLIED TO CYCLING.
PRAeZISIONSSIMULATIONSVORRICHTUNG FUeR DAS FAHRRADFAHREN.
DISPOSITIF **SIMULATEUR** DE PRECISION CON U POUR LE CYCLISME.
INVENTOR(S): Alvarez Fernandez, Manuel, Avda. Castrelos, 54 Ent, 36210 Vigo, ES
PATENT ASSIGNEE(S): Alvarez Fernandez, Manuel, Avda. Castrelos, 54 Ent, 36210 Vigo, ES
PATENT ASSIGNEE NO: 2042420
OTHER SOURCE: BEPA2000030 EP 0995466 A1 0020
SOURCE: Wila-EPZ-2000-H17-T2b
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in , ; , V

DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R FI; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R MC; R [redacted] R PT; R SE
PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELD[redacted] (Internationale Anmeldung)
PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 995466	A1	20000426
'OFFENLEGUNGS' DATE:			20000426
APPLICATION INFO.:	EP 1998-910748		19980331
RELATED DOC. INFO.:	WO 98-ES81		980331 INTAKZ
	WO 9949942		991007 INTPNR

L6 ANSWER 33 OF 34 EUROPATFULL COPYRIGHT 2000 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 787471 EUROPATFULL EW 199732 FS OS
TITLE: External device for eluding masculine impotence.
Aeussere Vorrichtung zur Behebung maennlicher Impotenz.
Dispositif externe pour remedier a l'impuissance masculine.
INVENTOR(S): Romero Vergara, Roberto Jose, Turina, 10 - 1, 47006 Valladolid, ES
PATENT ASSIGNEE(S): Romero Vergara, Roberto Jose, Turina, 10 - 1, 47006 Valladolid, ES
PATENT ASSIGNEE NO: 2263160
AGENT: Garcia Cabrerizo, Francisco, OFICINA GARCIA CABRERIZO S.L. Vitruvio 23, 28006 Madrid, ES
AGENT NUMBER: 53871
OTHER SOURCE: ESP1997045 EP 0787471 A1 970806
SOURCE: Wila-EPZ-1997-H32-T2b
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Spanisch; Veroeffentlichung in Englisch; Verfahren in Englisch
DESIGNATED STATES: R DE; R FR; R GB; R IT; R NL; R PT
PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 787471	A1	19970806
'OFFENLEGUNGS' DATE:			19970806
APPLICATION INFO.:	EP 1997-500024		19970129
PRIORITY APPLN. INFO.:	ES 1996-211		19960130

L6 ANSWER 34 OF 34 EUROPATFULL COPYRIGHT 2000 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 363440 EUROPATFULL EW 199720 FS PS
TITLE: METHOD FOR FACILITATING THE **PHYSIOLOGICAL** ADAPTION TO AN ACTIVITY/REST SCHEDULE AND APPARATUS FOR PRESCRIBING A SUBSTANTIALLY OPTIMUM STIMULUS REGIMEN OF PULSES OF BRIGHT LIGHT TO ALLOW A SUBJECT'S CIRCADIAN CYCLE TO BE MODIFIED TO A DESIRED STATE.
GERAeT ZUM VORSCHREIBEN EINER OPTIMALEN ABFOLGE VON LICHTIMPULSEN ZUR BEEINFLUSSUNG DES ZIRCADIANEN RHYTHMUS
UND VERFAHREN ZUM ERLEICHTERN DER **PHYSIOLOGISCHEN** ANPASSUNG AN EIN BESTIMMTES AKTIVITAeTS-RUHE-SCHEMA.
PROCEDE DE FACILITER L'ADAPTION **PHYSIOLOGIQUE** A UN SCHEMA D'ACTIVITE ET DE REPOS ET APPAREIL DE PRESCRIRE UNE SERIE DES IMPULSIONS DE LA LUMIERE CLAIRE POUR MODIFIER LA CYCLE CIRCADIENNE.

INVENTOR(S): CZEISLER, Charles, A., 380 Harvard Street, Cambridge, MA
02138, US;
KRONAUER, Richard, E., 14 Chauncy Street, Cambridge, MA 02138, US;
ALLAN, James, S., 5700 Bunker Hill Street, Pittsburgh, PA 15206, US
PATENT ASSIGNEE(S): BRIGHAM AND WOMEN'S HOSPITAL, 75 Francis Street, Boston,
Massachusetts 02115, US
PATENT ASSIGNEE NO: 351461
AGENT: SERJEANTS, 25, The Crescent King Street, Leicester, LE1 6RX, GB
AGENT NUMBER: 100131
OTHER SOURCE: EPB1997032 EP 0363440 B1 970514
SOURCE: Wila-EPS-1997-H20-T2
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R FR; R GB; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale Anmeldung)
PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 363440	B1	19970514
'OFFENLEGUNGS' DATE:		19900418
APPLICATION INFO.: EP 1988-907912		19880627
PRIORITY APPLN. INFO.: US 1987-66677		19870626
RELATED DOC. INFO.: WO 88-US2177		880627 INTAKZ
WO 8810091		881229 INTPNR
REFERENCE PAT. INFO.: GB 2035088 A		US 4543957 A
US 4600723 A		US 4665086 A

REF. NON-PATENT-LIT.: Proceedings of the Physiological Society, 25-26 March 1986 Journal of Physiology, 377, 68P, 1986, J. ARENDT et al, 'Phase Response of Human Melatonin Rhythms to bright light in Antarctica', see entire document American Journal of Physiology, 249 (Regulatory Integrative Comp. Physiol. 18), 1985, T. HOBAN et al, 'Light Effects on Circadian Timing System of a Diurnal Primate, the Squirrel Monkey', see entire document. (pp. R274-R280) Science, Vol. 235, 16 January 1987, A. LEWY et al, 'Antidepressant and Circadian Phase-Shifting Effects of Light. (pp. 352-354) Psychopharmacology Bulletin, Vol. 19, No 3, 1983, A. LEWY et al, 'Neuropsychobiology of Circadian and Seasonal Rhythms: Light as a "Drug"?', pages 523-524 Annals New York Academy of Sciences, 1985, pp. 253-59, A. LEWY et al, 'Immediate and Delayed Effects of Bright Light on Human Melatonin Production: Shifting "Dawn" and "Dusk" Shifts Dim Light Melatonin Onset', see entire document European Journal of Physiology, Pfluegers Archiv, Vol 396, 1983, pp. 85-87, R. WEVER et al, 'Bright Light Affects Human Circadian Rythms,' see entire document Photochemistry and Photobiology, Vol 34, pp. 239-247, 1981 (Pergamon Press Ltd., Great Brian), C. CZEISLER et al, 'Entrainment of Human Circadian Rhythms by Light-Dark Cycles: a Reassessment,' see entire document Annals New York Academy of Sciences, Part III, Health Effects of Interior Lighting 1985, pp. 282-304, R. WEVER, use of Light to Treat Jet Lag: Differential Effects of Normal

and Bright Artifical Light on Human Circadian Rhythms',
see entire document